

IN THE CLAIMS

A detailed listing of all claims is provided below, with a status identifier being further provided for each claim. Claims 1-4, 14-17, 22, and 29 are pending. Favorable consideration is respectively requested.

1. (Currently Amended) A method for processing an extensible mark up language (XML) document comprising:

parsing the XML document into a stream of schema elements and data elements;

receiving the stream of schema elements using an API;

converting the stream of schema elements into data type definition (DTD) objects;

validating the stream of data elements using the DTD objects; and

if valid, ~~constructing an in-memory tree representation of the XML document using the data elements~~ passing the stream of data elements to an application using the API.

Claim 2: Canceled

3. (Original) The method of claim 1, wherein the converting comprises referencing one or more tables that define the schema elements and associated functions for processing the schema elements.

4. (Original) A computer-readable medium having computer-executable instruction, which when executed by a computer, performs the method of claim 1.

Claims 5 – 13: Canceled

14. (Currently Amended) An architecture for processing an extensible mark up language (XML) document comprising:

a parser to parse the XML document into a stream of elements including a stream of schema elements and a stream of data elements;

~~a schema node factory, called by the parser, to handle calls to construct a node in an in-memory tree representation of the XML document for the elements~~
converter to convert the stream of schema elements into data type definition (DTD) object using an API and to validate the stream of data elements using the DTD objects; and

~~a schema builder, called by the schema node factory, to construct data type definition (DTD) objects used in validating the data elements~~
a schema node factory to pass valid data elements to an application using the API.

Claim 15: Canceled

16. (Original) A computer implemented with the architecture of claim 14.

17. (Original) A client-server system, comprising:

a server;

a client connectable to the server to exchange extensible mark up language (XML) documents;

at least one of the client and the server implementing the architecture of claim 14.

Claims 18 – 21: Canceled

22. (Currently Amended) A system for processing an extensible mark up language (XML) document comprising:

means for parsing the XML document into a stream of schema elements and data elements;

means for receiving the stream of schema elements using an API;

means for converting the stream of schema elements into data type definition (DTD) objects;

means for validating the stream of data elements using the DTD objects; and

if valid, means for ~~constructing an in-memory tree representation of the XML document using the data elements~~ passing the stream of data elements to an application using the API.

Claims 23 – 28: Canceled

29. (New) The architecture of claim 14, further comprising a validation node factory to evaluate whether the data elements comply with constraints set forth in the DTD objects.